ABSTRACT

The present invention involves a detachable half shaft assembly of a vehicle wheel end and has a shaft bell and a disc rotor. The detachable half shaft comprises a preloaded bearing assembly and a detachable body receiving the preloaded bearing assembly. The preloaded bearing assembly has an inner surface formed through inboard and outboard ends thereof. The detachable body has an inboard interface at an inboard end and an outboard interface at an outboard end. The inboard interface is configured for connecting to the shaft bell and the outboard is configured or connecting to the disc rotor. The detachable body has a bearing receiving portion defined by the stepped boss and a roll formed base. The bearing receiving portion radially receives the inner surface of the preloaded bearing assembly. The stepped boss and the roll formed base engages the bearing assembly and the inboard and outboard ends to maintain the preload thereon when the detachable half shaft assembly is detached from the shaft bell or the disc rotor.